

AMENDMENTS TO THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

The following listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A solid/liquid interface ~~(10) having comprising~~ a liquid facing surface, ~~(12), characterized in that wherein~~ the surface ~~(12) comprises~~ smooth ~~(30)~~ and non-smooth ~~(16)~~ structures, wherein the non-smooth structures ~~(16)~~ are arranged to maintain gas bubbles (18) proximate to the surface (12).

2. (currently amended) The interface ~~(10)~~ according to claim 1, further ~~characterized by comprising~~ bubble source means ~~(22, 26, 32)~~ arranged to produce bubbles ~~(18)~~ proximate to the surface.

3. (currently amended) The interface according to ~~claims 1 or 2~~ claim 1, wherein the non-smooth structures ~~(16)~~ comprise at least one protrusion ~~(16)~~ arranged on the surface ~~(12)~~ extending in a direction away from the surface.

4. (currently amended) The interface according to claim 3, wherein the at least one protrusion ~~(16)~~ extends at an angle ~~(28)~~ to the surface ~~(12)~~ thereby cooperating with ~~the~~ flat portions of the surface ~~(12)~~ so as to define a recess ~~(20)~~ arranged to maintain at least one bubble ~~(18)~~ proximate to the surface ~~(12)~~.

5. (currently amended) The interface according to claim 2, wherein the bubble source means comprises at least one gas feeding duct ~~(22)~~ arranged such that its outlet ~~(32)~~ is proximate to the surface ~~(12)~~.

6. (currently amended) The interface according to claim 5, wherein the bubble source further comprises a cavity ~~(26)~~ arranged between the feeding duct and the outlet ~~(32)~~ at the surface ~~(12)~~ so as to define a gas bleeding hole

7. (currently amended) The interface according ~~any of the claims 1-6~~ to claim 1, wherein the surface ~~(12)~~ comprises a hard material including at least one of a metal, ceramic and composite.

8. (currently amended) A window in a pulsed spallation neutron source comprising ~~the interface according to any of claims 1-7~~ a solid/liquid interface having a liquid facing surface, wherein the surface comprises smooth and non-smooth structures, wherein the non-smooth structures are arranged to maintain gas bubbles proximate to the surface.

9. (cancelled)

10. (cancelled)

11. (currently amended) A process for preventing cavitation erosion to a surface exposed to liquid, ~~characterized by the steps of comprising:~~

- a. introducing a plurality of bubbles proximate to the surface; and
- b. maintaining the bubbles on the surface.

12. (currently amended) The process according to claim 11, further comprising ~~the steps of~~ forming a non-smooth structure on the surface and arranging the non-smooth structure to capture the bubbles and maintain the bubbles on the surface.

13. (currently amended) The process according to claim 11, wherein ~~the step of~~ forming a non-smooth structure further comprises ~~the step of~~ forming a protrusion extending away from the surface and towards the liquid at an angle sufficient to form a cavity between the protrusion and surface of sufficient size so as to accommodate at least one bubble therein.

14. (currently amended) The process according to claim 11, wherein ~~the step of introducing a plurality of bubbles further comprises the steps of:~~

- a. arranging a bubble source proximate to the surface; and
- b. forming a bubble passage from the bubble source to the surface, the passage having an outlet at the surface for introducing the bubbles.

15. (original) The process according to claim 14, wherein the outlet comprises a bleeding hole.

16. (original) The process according to claim 11, wherein the surface comprises one of a metal, ceramic and composite.